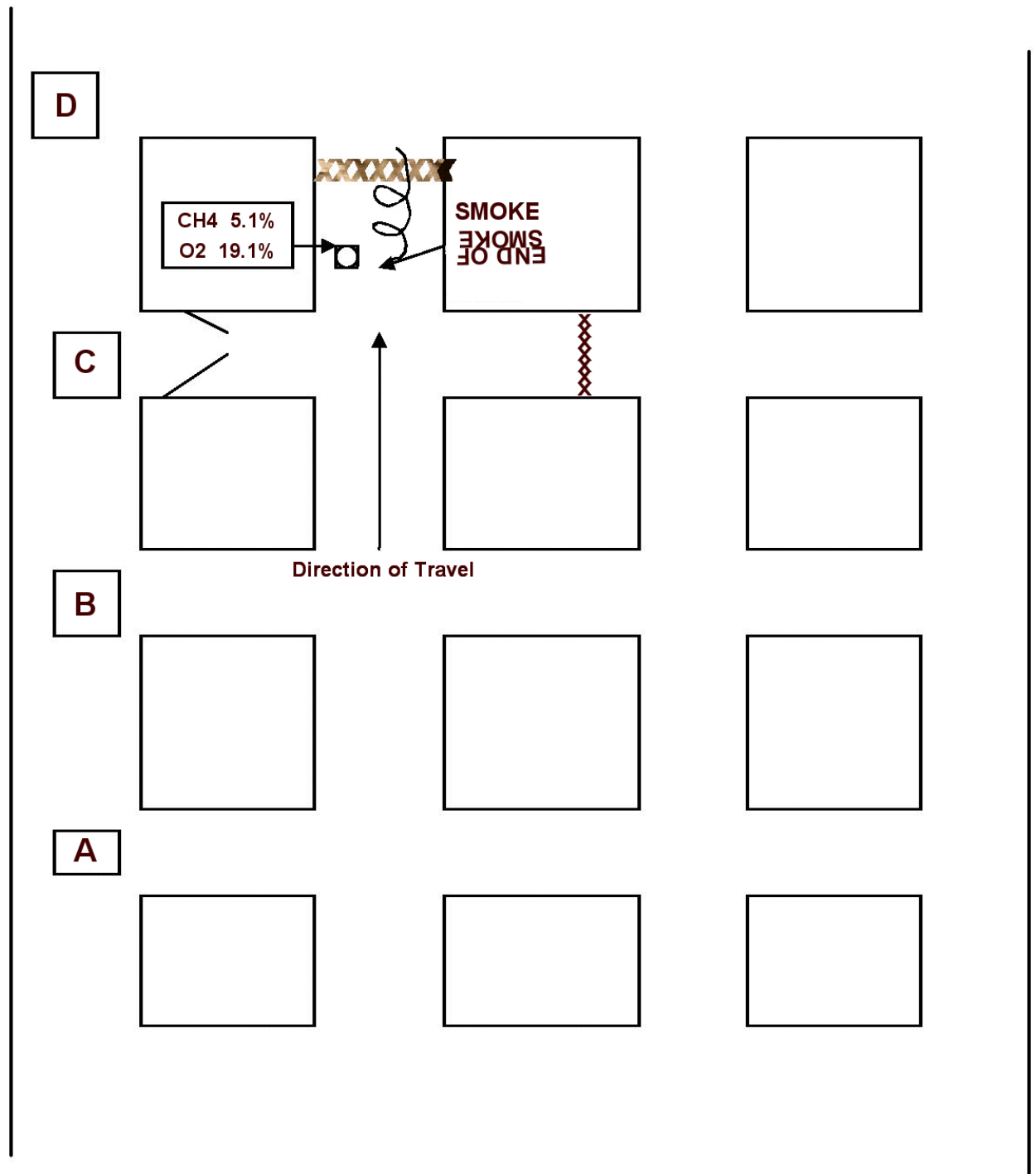


2005 Coal Mine Rescue Rules
Question Interpretation

A CARD



Q. A team is exploring and they travel into "C" intersection in the #2 entry. All areas behind are correctly explored. At this team stop, "C" intersection, #2 entry; coming from "B" intersection #2 entry, here is what they see: to the left 2-1, a damaged permanent stopping; to the right 2-3, a caved airtight; now for the area of question. Straight ahead "C" to "D" about 3 feet inby the ribline is a placard reading: 5.1% methane and 19.1% oxygen. Next to the gas placard is another placard indicating: "smoke/end of smoke". Naturally this is a pullout and an "FPA" is placed at this point on the "Team Map". But further ahead in that same entry "C" to "D", is an "unsafe roof" rib to rib or lets say a "caved" placard, either is outby "D" intersection. Does the Mapman map the "unsafe roof" or the "caved" area on his map, prior to the team leaving this team stop or stopping the clock? The main question is this condition mapped even though the Captain does not go past the FPA?

A CARD RULE 4 2ND PARAGRAPH

Conditions and/or objects that are in advance of the point that the captain has traveled shall not be recorded on the map, except for the following conditions when they extend from rib to rib: unsafe roof, caved areas, and water over knee deep. This also includes inextinguishable fires. The captain will examine these areas as close as practical, and this will require them to be located on the mine map.

The only way to map the caved area would be if the caved area stopped the captain. The smoke and Ch4 stopped the captain before reaching the caved area. Therefore the "unsafe roof" or "caved" area is not mapped since it is in advance of the area traveled by the captain.

Q. Can you use material from a permanent stopping that is not intact or partial blown out to be use to build some where else?

Yes, unless a placard or written instruction detect otherwise.

Q. Can we use a regulator that has been rebuilt as a temporary stopping?

Yes – mapped as temporary stopping.

Q. Stacking of "Xs" – how do we measure 6 ft distances if you can't stack the Xs? Does it matter if you put the X next to it, like in the entry or inby/outby?

When we measure map, we use a circle with a center point – put dot on center point of placard and you've got a 6' circle radius.

- Q. If you move a regulator and build it as a regulator someplace else, how do you mark on map?**

All team built stoppings are temporary stoppings and mapped as such. There would be no reason for a team to rebuild a regulator, it takes all the air for re-ventilation.

- Q. Regarding “verbatim” – if placard were to spell out word “Inches” and you put in quotation marks (“”) is that verbatim or not?**

If it is written out Inches then you have to put Inches – no quotation marks, no abbreviations – verbatim is as written on placard.

- Q. End of water on placard – how do you map?**

Use water symbol – start and end water with symbol and enter any changes in depth.

- Q. Moving of pump – does it have to be noted on map?**

Do not have to notate on map.

- Q. If you have water over knee deep and then pump it, what are you going to find on the other side?**

If they pumped water down and there's no water then you wouldn't find anything.

- Q. Map examiners show two sides of the water and when they grade map, map is docked for not having the backside of the water – so if you pump it there is no backside?**

Only reason that it should be on the backside is if you travel in a different direction or if the intent is to have both sides of the water mapped then a level of water less than knee deep should be shown on backside once the water is pumped and team travels through area.

- Q. How should light smoke be mapped?**

You only have to put light with smoke symbol. No X at beginning or end – just smoke symbol and word light.

- Q. A regulator found during exploration to be open and was closed by the team, would CLOSED notation be correct?**

Yes, Closed Notation, any conditions found must be noted, then final ventilation must be shown.

- Q. If the team rebuilds a partially blown out regulator, would rebuilt notation be correct or the symbol for a temporary stopping be required?**

There would be no reason for a team to rebuild a regulator it takes all the air for re-ventilation either open cross cut or a temporary stopping.

- Q. You have smoke on both sides of overcast; do you have smoke over the overcast?**

Yes, if there are no end of smoke placards to end the smoke. For mapping there will not be any smoke symbol over the overcast.

A CARD (Rule 5)

- Q. Rule 5, A Card - Extent of Smoke- Was the sketch intended to show only the extent of smoke or also how to map the smoke?**

This drawing is for extent of smoke only.

- Q. For mapping purposes; when a team tears down a barricade and builds it back, will a notation of "rebuilt" suffice, should it be mapped as a temp. stopping, or noted "converted to temp. stopping"?**

Rebuilt will suffice if the team does not move the location of the barricade.

B CARD

Figure 3

- Q: I heard in the rules meeting that timbers and post are to be considered the same thing. What about props, cans, cribs, chocks, etc.? Why not stick with just timbers as the rules state?**

A: The term "timbers" is only used in the rules when referring to the proper method of supporting unsafe roof. It is not the only absolute term. The legend has a circle symbol for "ANY ROOF SUPPORT INSTALLED BY THE TEAM." This is a problem design issue. Problems should be designed so that it is clear to the working team if a timber or its equivalent can be used to safely support unsafe roof.

RULE 5

- Q. Say the bottle when checking apparatus puffs up to 3135 PSI depending on tester – pressure may raise little bit – what's the call on that?**

Prior to starting the clock the bottle needs to meet the manufacturer's recommendation.

Rule 14

- Q: Does a fold up stretcher have to be unfolded at the FAB to test the stretcher?**

A: Rule 14 states that stretchers must be completely unloaded and tested by lifting both ends simultaneously with a team member lying in a prone position. This would also require that the stretcher be completely unfolded to be properly tested.

RULE 23

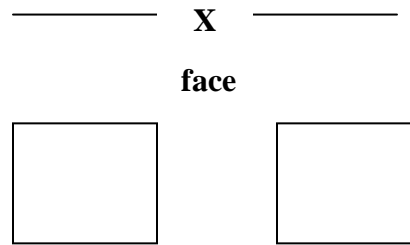
Q. If you have unsafe roof in FAB or stopping in FAB, what's required there?

Anything in FAB is mapped before team arrives and already checked and does not require D&I or gas and roof tests during initial entry work.

Q. Drawing 10 – unsafe roof on corner – you walk up to that intersection and you found that a fire was in the unsafe roof on the corner – what roof test would you do?

A zigzag around this corner would suffice for that area with the fire. Bad Problem Design.

Q. B Card - What's the proper roof test for a face if found like this:



The simulated roof test should be taken from imaginary rib-line to imaginary rib line of the cross cuts, including the face area.

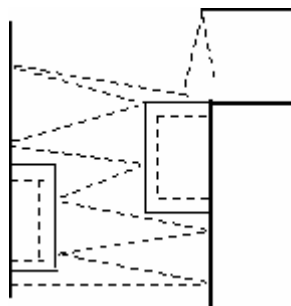
Q. Rule 23, B Card - Roof and Rib Test-The question is how does the captain know which roof test to perform?

The sketches for proper roof tests are covered in Figures 1(a) and 1(b) of the rules. Unsafe roof rib-to-rib is always a straight line test. If the example is not shown in the rules then a zig-zag test will be sufficient.

Q. Rule 23, B Card - The theory is that he is not supposed to see in front of his position and that he could start doing a rib-to-rib and encounter the face before the loose roof ties into the rib. The rule says rib-to-rib if it can be done safely.

Then the captain would need to back up and do a zigzag roof test.

Q. Is this the proper roof test when conditions are such?



There are no sketches to address this type of unsafe roof; therefore this would be a bad problem design.

Rule 23

Q. If two posts are found, are we expected to post to a person if it can be done or do we have the option of waiting to find at least two more posts?



X Person

The person is located in the unsafe roof then it will take at least 2 timbers to identify a live person or body. If problem designers want the person identified then there should be at least 2 timbers at some location in the problem. **See figure 3 on the PROPER INSTALLATION OF ROOF SUPPORT TO RECOVER A PATIENT.**

RULE 24

Q. You make ventilation change that does not affect an area, do you have to retest for gas?

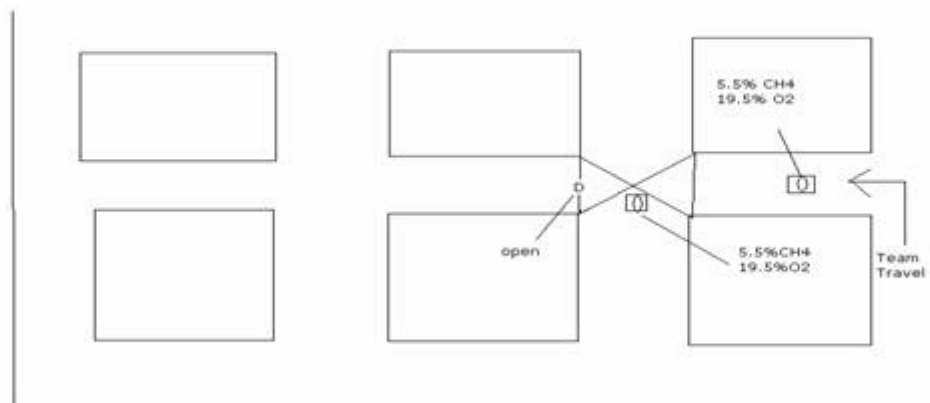
No, reference rule 19 for what a ventilation change is.

Q. What is the extent of gas for the placard between 3 & 4 toward the overcast? Specifically, is the gas on top of the overcast?

The gas would extend over to the overcast the next area to be tested.

Q. What is the extent of gas for the placard under the overcast with the door open?

The gas would be in the intersection only, the required gas tests would clear the inby the intersection and the crosscut with the door open.



RULE 24 (F)

SEE MAP BELOW

Q. Does the team have to make a gas check in the #2 entry at the placard upon re-entry into this area?

Yes, if one of the following has occurred starting, stopping or redirection of the air current or changes of the constituents.

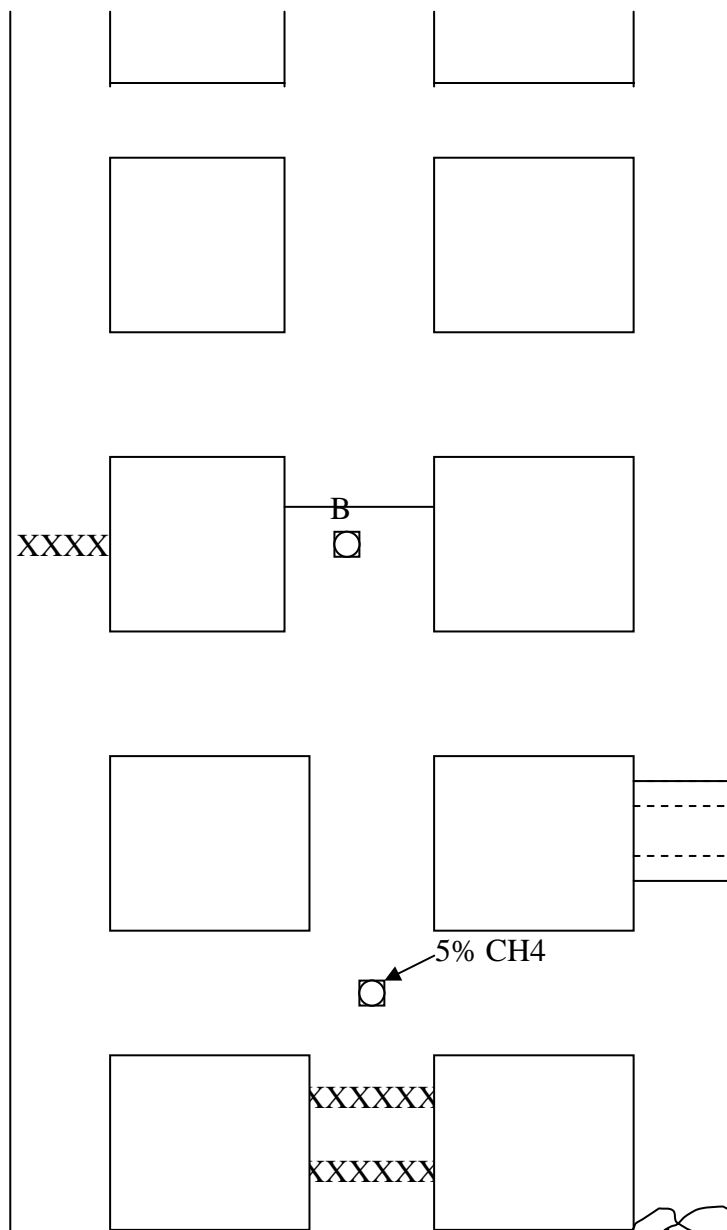
Q. While the team is @ team stop behind the fan, they have the B.O. to stop the fan. Upon re-entry into the #2 entry 1st line of crosscuts is another gas test required @ the gas placard?

Yes, if one of the following has occurred starting, stopping or redirection of the air current or changes of the constituents.

Q. The team is @ barricade in #2 entry, tell the B.O. to start the fan. The team travels back to the #3 entry, back side of the fan. Does the team have to make a gas test at the placard in the #2 entry 1st line of crosscuts?

Yes, if one of the following has occurred starting, stopping or redirection of the air current or changes of the constituents.

SKETCH FOR 24(F)



RULE 27

- Q. Anything you find within the mine already built you have to D&I during initial exploration – the team built stoppings, can you D&I anytime?**

Anything already built you have to D&I during initial exploration – team built stopping you can D&I anytime after you start construction, but before you stop clock or you move the stopping, team built stoppings are the only exception; everything else has to be D&I during initial exploration.

- Q. Can you set all 4 timbers and pass up body before you D&I or set 2 timbers and reach in?**

You need to set at least 2 timbers to reach in. If you pass the body, you will get docked.

- Q. If you're showing person when you start to set timbers, at what point do we show team a body or live person?**

No rule on it, encourage that when you touch person, it should be revealed at that point.

RULE 28

- Q. If you had problem with shaft in it, where would the 50' check be?**

The 50' check would be once you get to bottom within 50' of the shaft bottom.

Rule 30

Q: If you had a placard that said "last row of bolts," does this stop the captain from going in by the placard.

A: Rule 30A covers travel under unsafe roof, unsafe rib, or overhanging brow. Although it is unsafe to go past the last row of bolts this is not covered under the mine rescue rules and would be a bad problem design. If the intent is to stop a team the problem should be designed with a condition more clearly defined within the mine rescue rules.

RULE 31

- Q. If you find an energized cable in an explosive mixture requiring retreat to FAB, do you have to stop clock or if you were able to de-energize power can you do that and continue problem?**

No, the power cannot be de-energized to change a withdrawal situation – once it's a quitter – it's a quitter. It would create too many variables.

RULE 31(B)

- Q. Statement says there are batteries in mine on section and you find an explosive mixture in the mine, is this a withdrawal situation?**

No –31(B) states you have to find batteries in an explosive mixture to make it a withdrawal situation.

- Q. 31(B) Energized cable has to be found in an explosive mixture, not just going into but found in.**

Yes

- Q. Would you treat energized cable the same way you would smoke?**

No, energized cable has to be found in the explosive mixture.

RULE 42

- Q. If you enter barricade and you have conscious person and you remove barricade and find timbers you need to access a person under unsafe roof, can you stop and timber, then check that person on way out or do you remove person from barricade first?**

You have to remove person from barricade first.

- Q. If you had posts and you're going outby a person and you walked by him and drop the posts at that location on way by, would that be considered additional work?**

No, it would not be if that were on your route of travel.

- Q. Normal team stop – you enter barricade on team stop and you find timbers and there's a person outby in unsupported top you can get to in that same team stop, would that be "normal work" you can do at that team stop? Is the team allowed to do everything they can on team stop without retreating or advancing?**

That's true – whatever you can do at that team stop. If you can reach the 2nd patient and have material to do so during that stop you can get him.

- Q. Rule 42 (A) of the 2004 Coal Mine Rescue Rules says " when a team finds a patient(s), either by visual or verbal contact, every effort must be made to remove them safely and promptly to the fresh-air base. Visual contact will require the captain's presence in the area." Would it be possible to get a clearer definition of "in the area". I assume that vision would be blocked by unsafe loose roof or water over knee deep. Normally we are to assume we cannot see in advance of the teams progress, however, once I have breached a barricade can I see the patient?**

Visual contact of a patient is treated the same as mapping objects. If a patient is in advance of the point that the captain has traveled then the team cannot see the patient. If the team has made verbal contact with a patient behind a barricade, then the patient is considered to be found even though the captain has not established his presence in the area of the patient. If the barricade is opened and verbal contact has not been established with the patient, then the captain cannot see the patient until his route of travel brings him perpendicular to the patient's position.

RULE 42 (C)

- Q. "As soon as means and /or materials are available"
If the teams has located a person behind a barricade and can not ventilate because needed brattice materials are not available at that time and upon exploration that encounter the brattice material needed to ventilate. Does the team have to stop prior to the #5 team member passing the material, get the material and ventilate?**

Yes, but the team may perform any function during this team stop.

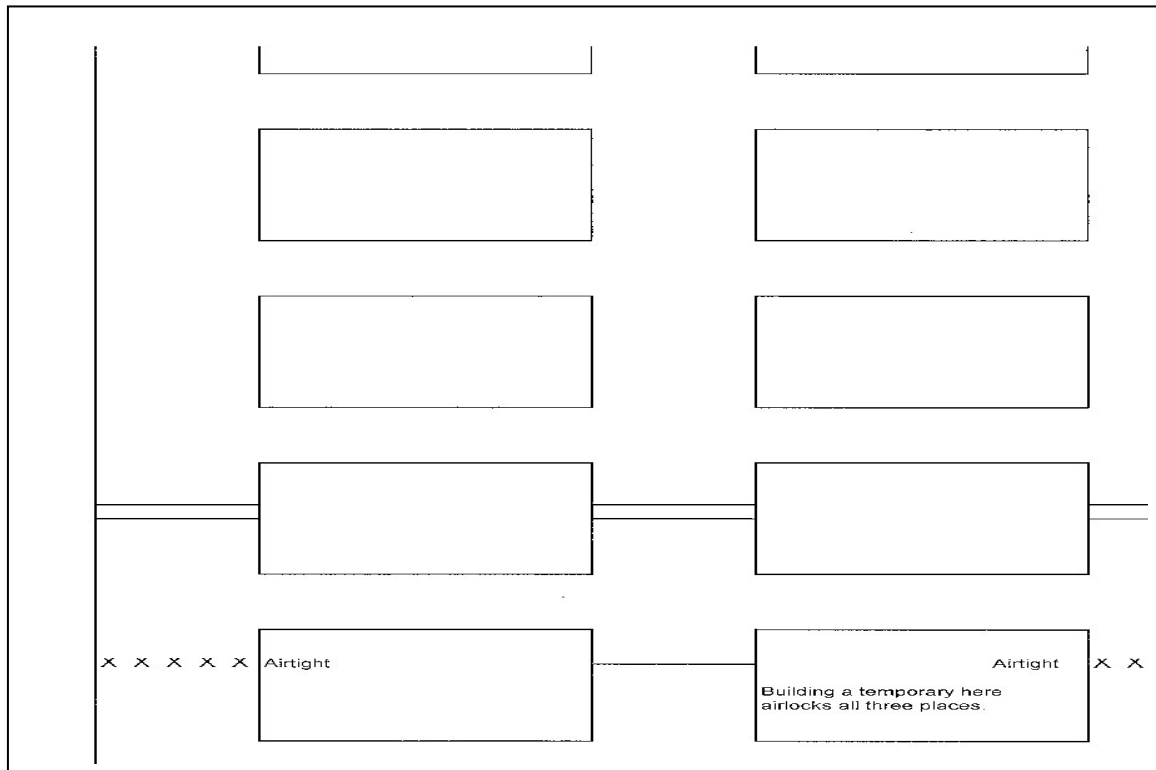
RULE 43

Q: If I have been to all sides of water roofed, where do I have to build to pump the water?

A: An equivalent airtight separation must be maintained when pumping water roofed. If the water roofed is in an entry or crosscut one build is required; a 3-way intersection two builds are required; a 4-way intersection three builds are required. If there are two sides blocked, one airlock is needed. If there are three sides blocked, two airlocks are needed. If four sides are blocked, three airlocks are needed.

Q: What is an equivalent airtight separation? Let's say just inby the second crosscut there are stoppings across each entry of 1,2, and 3. Just outby the

second crosscut there is caved airtight in 1 and 3. If I build across 2 with a temporary that would be an equivalent airtight separation and I can open any of the three stoppings across 1,2, and 3 without making any other builds. I really would have liked to stay with site specific. The only exception would be if conditions (unsafe roof etc.) kept you from building site specific.



A: An equivalent airtight separation would require an airlock built for each permanent stopping removed.

Q. If you have guy behind barricade and you have dotted line – what does this guy have to tell you before you don't have to build airlock to go in?

The patient must inform the team that the area is "airtight." The key is the information given to the team must include the word "airtight" before a team can enter a barricade without airlocking.

Q. If solid line map?

The patient must inform the team that the area is "airtight." The key is the information given to the team must include the word "airtight" before a team can enter a barricade without airlocking.

Q. If solid line map and there's no communications?

Then you have to airlock.

Q. If you have stopping with hole in it, do you have to build to go through?

No

Q. Rule 43 of the Mine Rescue Rules states that if a person behind a barricade or stopping relays information sufficient to ensure that the ventilation will not be affected, an airlock is not required. What exactly is required to be sufficient?

The patient must inform the team that the area is "airtight." The key is the information given to the team must include the word "airtight" before a team can enter a barricade without airlocking.

Q. Rule 43, B Card - Air Lock- Do you have to air lock as shown if you are airlocked outby already?

An airlock is required, before breaching stoppings, doors, seals, barricades, closed regulators or removing water roofed, **if conditions on the other side are unknown. The outby airlocks would not suffice.**

- Q. Rule 43, B Card - In other words, if all your entries are sealed at the mouth and no ventilation change occurs would you have to build an air lock to enter the stopping between No. 1 and 2 as shown or would the outby airlocks suffice?**

An airlock is required, before breaching stoppings, doors, seals, barricades, closed regulators or removing water roofed, **if conditions on the other side are unknown. The outby airlocks would not suffice.**

If roofed water must be pumped in order to ventilate a section of a mine and the following situations have occurred.

1. The team has explored on all sides of the roofed water.
2. The team has a "solid" line map indicating that the projections are accurate and that there are no unmapped openings above, or below the seam.
3. The ventilation is such that removing the water will not change the course of airflow.

- Q. In the above case, does airlocks have to be constructed on either or both sides of the water. It stands to logic that given the situation above, no air movement will occur as a result of pumping the water. However, I have had varying opinions from local contest officials.**

The team must airlock prior to pumping the water at the location from which they work to pump the water. This decision follows an interpretation which was provided in 1996, after discussion at the Rules Interpretation Meeting in Beckley, WV, and a review of the information discussed at the Permanent Rules Committee Meeting. Even though the "water roofed" had been explored on all sides, and the removal of such water would not effect ventilation changes, the determination was made that since the area under the water had not been explored, and the captain's physical presence had not been in the area, that an airlock would be required. Only one airlock stopping is necessary, and it should be built in the area from which the team is working to pump the water, or the location from which the team is waiting to enter the area when the water is pumped.

RULE 45

Q. If you come up #2 entry, 1st intersection has contaminant – are you allowed to go by the accessible opening on right to follow that contaminant on left?

No – if you take the #5 man completely past that accessible opening you have to tie out behind stopping before you can do that.

RULE 45 (C & D)

SEE MAP BELOW

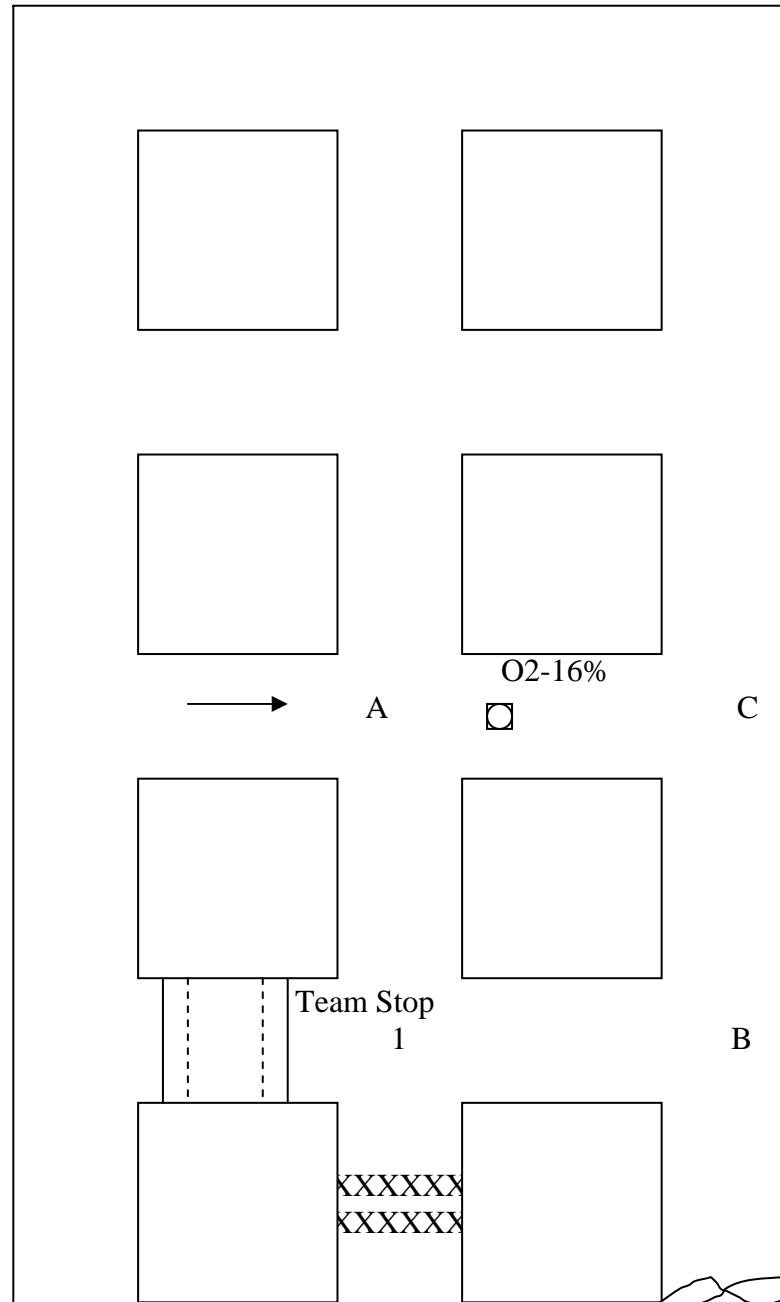
- Q. The team travels into the #2 entry and finds low 02 at location (A) in crosscut between #2 and 3 entries. The team ties outby in the #2 entry to the caved area. From team stop label #1 can team next move be to the #3 entry location (B)?**

Yes, the team is still tying behind and a cross.

- Q. Can a team advance from location (B) to (C)?**

Yes.

SKETCH FOR RULE 45 (C&D)



Rule 46

- Q. Can a partially destroyed “wingwall” on an overcast be rebuilt?
Can a completely destroyed overcast be rebuilt? And last, but not
least can the material from a completely destroyed overcast be used
for stopping material?**

An overcast cannot be rebuilt as an overcast if completely destroyed, but if the materials from the destroyed overcast are on the field they can be used to build temporary stoppings. If a wingwall, overcast or undercast are damaged it cannot be removed or altered by the team according to Rule 46 of the B Card.

RULE 49

- Q. Can you give an example for “Team members holding up brattice cloth in an attempt to clear a contaminant shall be discounted under this rule and the contaminant shall not be cleared”?**

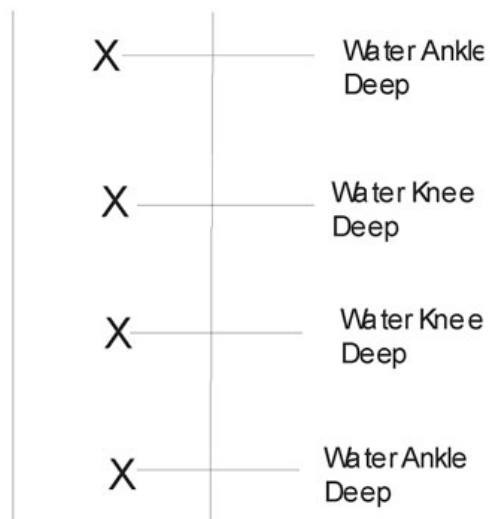
The legend states line curtain (LC) is the designated curtain provided for removing contaminants of explosive gases. Line curtain can only be hand held to remove gases. If brattice cloth is to be used it must be used with frames. That is the reason LC was add to the legend.

RULE 50

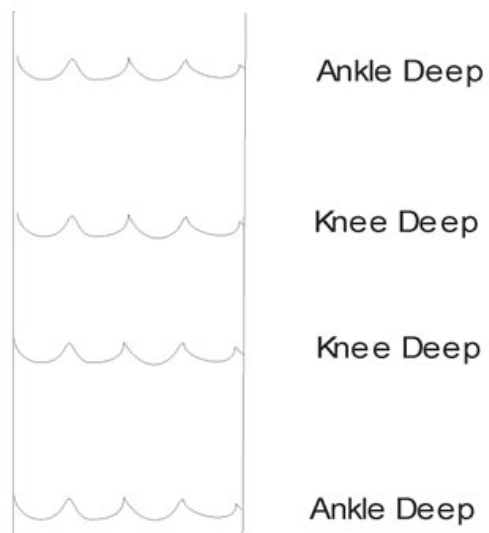
- Q. We would like to know if it is possible for us to affix the name tags to the BG-4 machines as we would like to use the light pouches that will fit on the machine harness. The problem is these machines will have to last for several years and we don’t want to have to keep changing the tags every time a team member changes. The tags could be attached by means of a key reign and attached to the webbing that way.**

Velcro, brads, rings, snaps etc. must attach the metal identification tag to his/her belt or the waist belt of the BG-4.

Q. What is the correct way to map these conditions?



The correct way to map these conditions is:



DRAWING INTERPRETATIONS

DRAWING PAGE 40

Summary of questions asked and responses

The drawings for parallel airflow and removal of gases were provided to teams and problem designers in 1998, as a guideline as to how ventilation was expected to be for "all contests". The major complaint from teams at that time was, as they worked problems at different contests, the expectation of how a problem was to be ventilated, would be different. Some problem designers expected teams to figure resistance, distance, short circuits, and possibly other factors. The drawings were provided to put all teams and problem designers on the same level as to how to ventilate mine rescue problems at "all contest".

Q: If the fan is running and there is more than one opening into the mine, will air move from any opening to the fan, or will it take only the shortest route? This is different from past interpretations.

A: There is no change in this interpretation the air will always take the shortest or equivalent path that the air can travel through the section from each source. Each source has its own independent path. A drift mine where all entries are open to the outside and a fan is located in the #1 entry generally will allow the air to enter through the closest open entry to the mine and travel to the fan. A mine with the fresh air base located underground that intake air is being point fed out by the # 3 entry may be able to enter in by the fresh air base and exit through several different equivalent paths.

Q. Is the fresh-air base on the surface?

Yes

Q. Why does air travel up Entries 2, 3, & 4?

In reality, when a fan is installed in the NO. 1 Entry, there would be an air movement in the Nos. 2, 3 and 4 entries. The number of crosscuts traveled by the air from where it enters to the fan is five crosscuts regardless if the air travels through entry 2, 3, or 4. Therefore, since the distance is equal there is parallel air flow in all of the entries.

Q. Should we assume that a fan in the Nos. 1, 2, 3 or 4 entries would pull or push air through all other entries if it is a surface base fan?

Yes, if the situation (referring to the location of stopping, is the same as the drawing referred to and the distance from where the air enters the mine and travels through the fan is equal along each path through the fan.

Mine Map Legend

Q: A placard reading “BODY” is placed in elongated unsafe roof. The problem contains no timbers to reach him/her. How is this to be mapped?

A: The symbol for “BODY” contained in the legend is the only symbol that can be used. Indicate the position of head and feet as body is found. Also denote any additional information that is shown on the placard.

Miscellaneous

Q. If a pump is found without cable, suction, or discharge line can it be used to de-water?

Problem design and team briefing should answer this question. Placards, layout, etc. should clearly indicate the pump's intended use.